

ABSTRACT OF THE DISCLOSURE

Techniques for measuring client-side performance include intercepting an item that is to be sent to a client process prior to the arrival of the item at the client process. The item is modified to produce a modified item that includes code. The code causes a processor on the client device to measure performance related to a service associated with the item. The code also causes the processor to perform one or more acts based on a measurement resulting from measuring performance. The modified item is sent to the client process.

These techniques allow a service provider to automatically modify an item each time the item is sent to a client process, dispelling cumbersome steps in installing and maintaining software on a client device. The modifications may be made transparent to a designer of the server application and thus easily applied to both new and existing server applications.

These techniques also allow the service provider to obtain measurements of actual performance experienced by the real users and without placing a spurious load on the website. The code in the modified item can be tailored to provide any response desired, from reporting those measurements to the service provider for analysis by the service provider, to automatically notifying the user of the client process, to automatically diagnosing the cause of unfavorable performance such as by correlating performance problems with particular components of the client process.